User's Manual to the

BOOST Database for Mexico

The World Bank
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1. Introduction

A central function of any government involves collecting and spending public funds and maintaining records of such expenditures. Budgets are at the core of government activity: they provide a clear picture of what the national priorities are, and where governments can make efficiency gains. From that perspective, timely and concise budget analysis is necessary for policymaking. Despite their relevance for policymakers, public budgets are usually hard to access and understand, even though IT-based applications can open doors for analysis and policymaking.

In that spirit, the World Bank has collaborated with governments around the World to create easy-to-use public expenditure (BOOST) databases that make budgets accessible, understandable, and ready to use. The Mexico database was built as part of the BOOST project which aims to improve accessibility and use of fiscal data for enhanced expenditure analysis. The platform – the most comprehensive created to date - includes revenues, debt stocks and expenditures (including tax expenditures) at the Federal, State and Municipal levels as well as basic data on parastatals, drawn from the following sources:

- The information for federal budget and spending was taken from the official website of the *Secretaría de Hacienda y Crédito Público website*[1] and by the *Transparencia Presupuestaria, Observatorio del Gasto*[2] from 2008 onwards.

- The information to build Mexico's State and Municipal data on revenues and expenditures (only executed amounts) was taken from the *Sistema Estatal y Municipal de Base de Datos*[3] (SIMBAD) for the period between 1989 onwards[4].

- Debt stocks for municipalities[5] and states[6] from 2005 onwards were collected from the Ministry of Finance portal.[7]

- Revenue data and debt stocks for federal entities were collected from the Ministry of Finance transparency portal.[8]

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[1] http://www.shcp.gob.mx/Paginas/default.aspx
[2] http://www.transparenciapresupuestaria.gob.mx/ptp/index.jsp
[3] http://sc.inegi.org.mx/sistemas/cobdem/
[4] User should select ""Estadistica de finanzas publicas estatales y municipales" then select relevant variables – once output is produced, make sure to expand columns and finally download to excel
[5] URL: http://www.hacienda.gob.mx/Estados/Deuda_Publica_EFM/Paginas/registro.aspx, then click on indicadores de deuda and select appropriate year (and 4 trimestre) – finally Select "Obligaciones Financieras de Municipios con la Banca Comercial, de Desarrollo, Emisiones Bursátiles y Otros." – the downoaded file will need substantial work to match municipality names to existing codes in the dataset.
[6] URL: http://www.hacienda.gob.mx/Estados/Deuda_Publica_EFM/Paginas/registro.aspx, then click on indicadores de deuda and select appropriate year (and 4 trimestre) – finally Select Obligaciones Financieras de Entidades Federativas y Municipios garantizada con participaciones e ingresos propios, con la banca comercial, de desarrollo y en emisiones bursátiles. Note that from 2010 onwards, state data included municipal debt therefore amounts reported in the site need to be discounted by the total debt reported by individual municipalities in each state downloaded from transparency portal as per footnote 5.
[7] http://www.hacienda.gob.mx/Estados/Deuda_Publica_EFM/Paginas/Presentacion.aspx

- Data on arrears to electricity company from 2013 onwards were collected from IFAI (infomex.org.mx)[9].

- Data on tax expenditures were collected from the Fiscal Transparency portal and inputed manually into the BOOSt database.[10]

- Expenditure amounts for four federal public entities (ISSTE, IMSS, CFE and PEMEX) were taken from *Estadísticas Oportunas de Finanzas Públicas de la Secrtearía de Hacienda y Cuentas Públicas.*[11]

This is a tool designed to promote budgetary analysis by public officials and researchers. This manual describes the database and provides the information necessary to update and analyze Mexico public expenditures and revenues. This document is organized as follows:

- Part II outlines the structure of the data provided by the Mexico Government.
- Part III presents the organization of the database.
- Part IV explains how to use the database with an Excel pivot table.

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We hope this database is helpful in opening new avenues of analysis and providing answers to important questions regarding the efficiency, equity, and effectiveness of government spending.

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[8] http://www.transparenciapresupuestaria.gob.mx then click on "Finanzas Publicas" tab. For revenues,click on ingresos, then gobierno federal and choose ingresos again. For debt, click on deuda publica, then select sequentially first deuda interna and externa for gobierno federal. Do the same for sector public federal from which only data on "organisismos y empresas" will be placed into the boost.

[9] A query to the IFAI was made to request data on arrears of municipalities towards the CFE (electricity company) – this data , starting from 2013 will be incorporated in the BOOST file

[10] http://www.shcp.gob.mx/INGRESOS/Paginas/presupuestoGastos.aspx

[11] http://www.shcp.gob.mx/Paginas/default.aspx. For approved amounts, click on *Presupuesto* (tab), then on the drop-down menu select *Presupuestp de egresos de la federacion*..On the left hand side menu select *presupuesto de egresos* , then select the *Presupuesto de egresos de la federacion ejercicio and the* year you are looking for, then choose *Tomo V - Entidades de Control Directo and finally*, select the information contain in the document *APE*. For executed amounts, click on *Finazas Publicas* (tab), then select *Estadisticas Oportunas de Finzas Publicas, then* select *Flujos de Fondos and finally* select *Situacion financiera de Pemex, IMSS, CFE and ISSSTE*.

2. Structure of the Database

Federal Government

The data for the Mexico's Federal Government includes budget and expenditures executed by different agencies of the Federal Government. The data is disaggregated by administrative, functional, economic and program classification. The source of funding for each budget line is also identified. Also, there is a geographic variable that identifies the region area where budget amounts were executed for the year 2012.

Table 1 classifies the variables of the Mexico's Federal Government database according to classifications of other BOOST public expenditure databases created by the World Bank.

Table 1. Variable description

BOOST labels	**Original Variables**
Administrative variables	
ADMIN1	*Ramo*
ADMIN2	*Unidad Responsible*
Functional Variables	
FUNCTION1	*Grupo Funcional*
FUNCTION2	*Función*
FUNCTION3	*Subfunción*
Economic classification variables	
ECON0*	*Egresos, ingresos, acervo de la deuda*
ECON1*	*Tipo Gasto*
ECON2*	*Economic Level 2*
ECON3*	*Economic Level 3*
ECON4*	*Objeto del Gasto (2008-10) Economic Level 4 (2011-2012) variable created by BOOST team.*
ECON5*	*Objeto del Gasto (2011-12)*
Program variables	
PROGRAM1	*Actividad Institucional*
PROGRAM2	*Identificador del Programa Presupuestario*
PROGRAM3	*Programa Presupuestario*
Source of funding variables	
SOURCE_FIN1	*Fuente de Financiamiento*
Other Variables	
GEO1	*Entidad Federativa*
Expenditure variables	
APPROVED	*Original Autorizado*
EXECUTED	*Presupuesto Total Ejercido*

* Notes: Variable created by the BOOST team.

State and Municipal Governments

The data for Mexico's State and Municipal Governments includes expenditures executed by different agencies of the State and Municipal Governments. The data is disaggregated by administrative and economic classification. Additionally, it identifies a geographical classification for the executed amounts.

Table 2 classifies the variables of the Mexico's State and Municipal Governments database according to classifications of other BOOST public expenditure databases created by the World Bank.

Table 2. Variable description

BOOST Variables	**Original Variables**
Administrative variables	
ADMIN1	*Estado o Municipalidad*
ADMIN2	*Nombre de Estado o Municipalidad*
Economic classification variables	
ECON0*	*Egresos, ingresos, acervo de la deuda*
ECON1	*Categoría*
Other Variables	
GEO1	*Estado*
Expenditure variables	
EXECUTED	*Presupuesto Total Ejercido*

*** Notes: Variable created by the BOOST team.**

2.1 Particularities of the Data of the Federal Government

The Mexico database presents the following particularities:

- The data on budgets and expenditures executed by the Federal Government (2008-2012) comes from *Transparencia Presupuestaria, Observatorio del Gasto* (Fiscal Transparency Portal). However, the Fiscal Transparency Portal did not present data on budget and expenditure amounts for the following federal public entities:
    - Instituto Mexicano del Seguro Social (IMSS),
    - Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado (ISSTE),
    - Petróleos Mexicanos (Consolidado) (Pemex)

- The Fiscal Transparency Portal provided information on the expenditures executed by the *Comisión Federal de Electricidad (CFE*) (another federal public entity*)* for the period between 2008 to 2012. However; these amounts were under-estimated if compared to the data found in the website of the *Secretaría de Hacienda y Cuenta Pública* (Ministry of Finance). For consistency purposes, the BOOST team decided to use the data found in the official website of the Ministry of Finance.

- Expenditure amounts (for the four federal public entities mentioned above) were taken from *Estadísticas Oportunas de Finanzas Públicas de la Secrtearía de Hacienda y Cuentas Públicas* (the Public Finance Statistics section of the Ministry of Finance website.)

- Budget amounts (for the four federal public entities mentioned above) were taken from *Presupuesto de Egresos de la Federación de la Secretaría de Hacienda y Cuentas Públicas* (Budget of the Federation section of the Ministry of Finance website.)

- The Fiscal Transparency Portal provided information on Budget and expenditure amounts for the public entity *Desarrollo Social* (Social Development) for the year 2010. However; these amounts were under-estimated if compared to the data found in the website of the Ministry of Finance. For consistency purposes, the BOOST team decided to use the data found in the official website of the Ministry of Finance.

- ECON0 was a variable created by the BOOST team, which contains Egresos (Expenditures), *Ingresos* (Revenues) and *Acervo de Deuda* (Debt).

- For the period 2008-2010, the data presented information on *Tipo de Gasto* (ECON1) and Objeto del Gasto (ECON4). The BOOST team created, using the *Clasificador por Objeto del Gasto para la Administración Pública Federal* (chart of accounts), two additional economic classifications (ECON2 and ECON3) to provide a clearer sequence of the economic classification of the Federal Government.

- For the period 2011-2012, the data presented information on *Tipo de Gasto* (ECON1) and a more desegregated Objeto del Gasto (ECON5). The BOOST team created, using the *Clasificador por Objeto del Gasto para la Administración Pública Federal* (chart of accounts), three additional economic classifications (ECON2, ECON3 and ECON4) to provide a clearer sequence of the economic classification of the Federal Government.

3. How to use the Mexico Database. Some examples

For ease of use, the BOOST team has developed a standard user interface through which to access the BOOST government expenditure database with the help of Excel PivotTables.

A PivotTable report is an interactive way to quickly summarize large amounts of data. Use a PivotTable report to analyze numerical data in detail and to answer unanticipated questions about your data. A PivotTable report is especially designed for:

- *Querying large amounts of data in many user-friendly ways.*
- *Subtotaling and aggregating numeric data, summarizing data by categories and subcategories, and creating custom calculations and formulas.*
- *Expanding and collapsing levels of data to focus your results, and drilling down to details from the summary data for areas of interest to you.*
- *Moving rows to columns or columns to rows (or "pivoting") to see different summaries of the source data.*
- *Filtering, sorting, grouping, and conditionally formatting the most useful and interesting subset of data to enable you to focus on the information that you want.*
- *Presenting concise, attractive, online or printed reports.*[12]

PivotTables are straightforward and easy to use and allow for quick, customizable analyses of large amounts of data. This section presents several examples of using the BOOST PivotTable interface to general custom reports. With BOOST, as with many things in life, the best way to learn is by doing.[13]

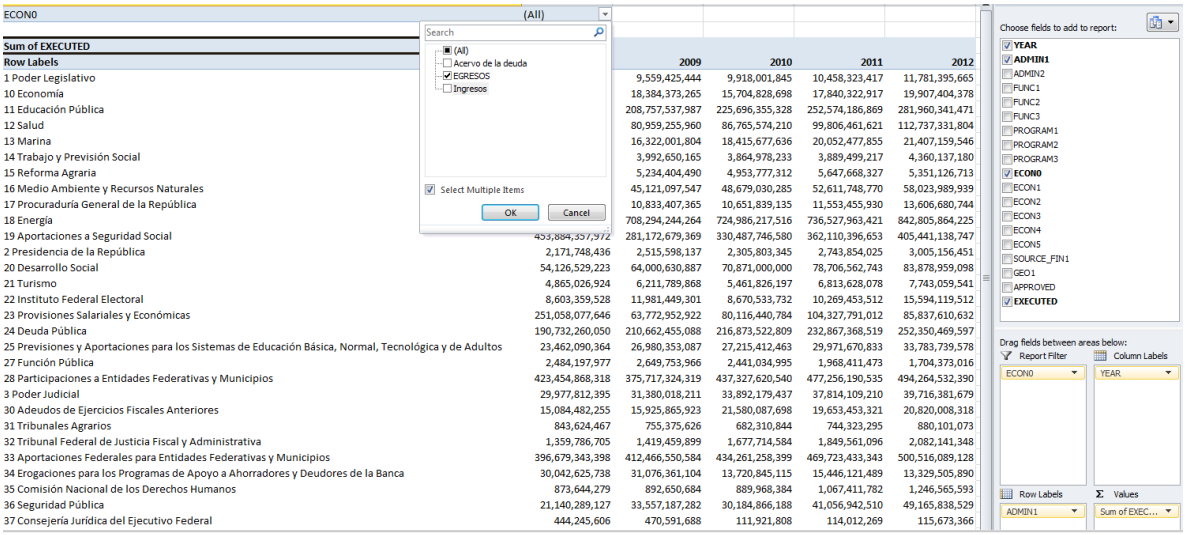
[12] For more information on Excel PivotTables, please consult the help function in Microsoft Excel or this helpful overview of the Microsoft website: http://office.microsoft.com/en-us/excel-help/overview-of-pivottable-and- pivotchart-reports-HP010177384.aspx.

[13] The minimum technical requirements for using the Moldova BOOST government expenditure database are as follows: (i) a computer with at least 1 GB of RAM (2 GB preferred); (ii) Microsoft Excel version 2007 or later (or similar database software that allows loading of files with at least one million lines of data).

3.1. Example 1. Trend Analysis by Administrative Unit

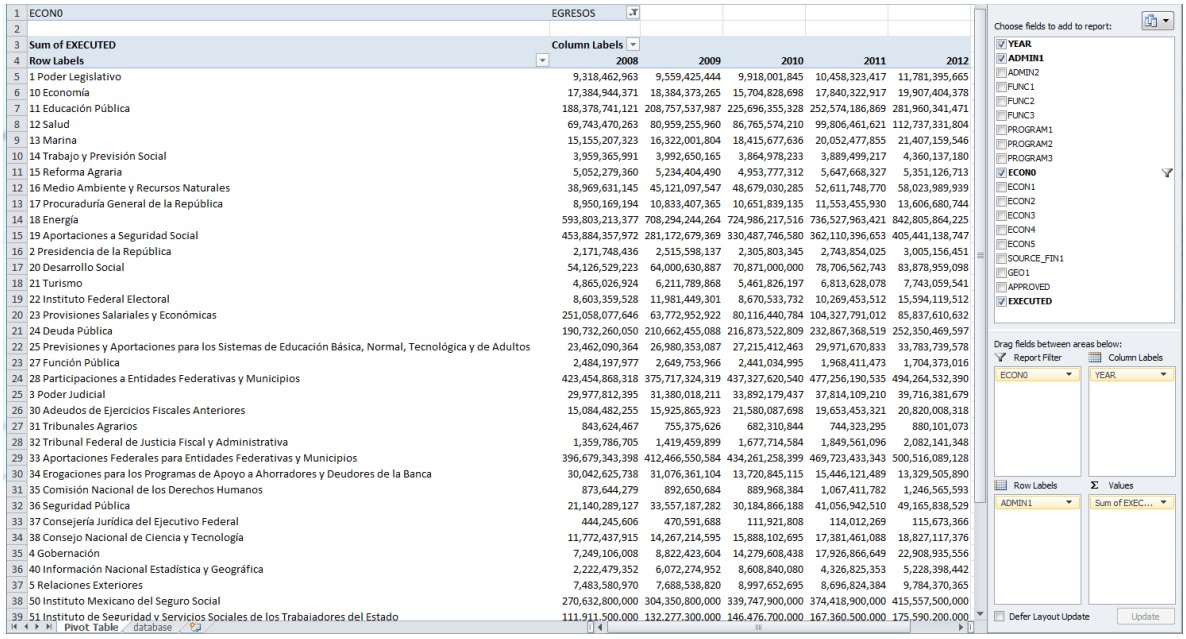
Figure 2 below presents a simple example of time trend analysis at the macro level. It reports total federal government expenditures from 2008 to 2012, broken down by the top-level administrative classification. To generate this PivotTable, *ADMIN1* is placed in the Row Labels box, *Year* in the Column Labels box, ECON0 in the Report Filter, and the values in the body of the table consist of the sum of the *EXECUTED* variable.

Note: It is necessary to filter ECON0 by clicking on the gray square in the right side of cell and ticking off "Acervo de deuda" and "Ingresos" to have only expenditures amount.



ECON0	(All)
Sum of EXECUTED	
Row Labels	2009	2010	2011	2012
1 Poder Legislativo	9,559,425,444	9,918,001,845	10,458,323,417	11,781,395,665
10 Economía	18,384,373,265	15,704,828,698	17,840,322,917	19,907,404,378
11 Educación Pública	208,757,537,987	225,696,355,328	252,574,186,869	281,960,341,471
12 Salud	80,959,255,960	86,765,574,210	99,806,461,621	112,737,331,804
13 Marina	16,322,001,804	18,415,677,636	20,052,477,855	21,407,159,546
14 Trabajo y Previsión Social	3,992,650,165	3,864,978,233	3,889,499,217	4,360,137,180
15 Reforma Agraria	5,234,404,490	4,953,777,312	5,647,668,327	5,351,126,713
16 Medio Ambiente y Recursos Naturales	45,121,097,547	48,679,030,285	52,611,748,770	58,023,989,939
17 Procuraduría General de la República	10,833,407,365	10,651,839,135	11,553,455,930	13,606,680,744
18 Energía	708,294,244,264	724,986,217,516	736,527,963,421	842,805,864,225
19 Aportaciones a Seguridad Social	281,172,679,369	330,487,746,580	362,110,396,653	405,441,138,747
2 Presidencia de la República	2,515,598,137	2,305,803,345	2,743,854,025	3,005,156,451
20 Desarrollo Social	64,000,630,887	70,871,000,000	78,706,562,743	83,878,959,098
21 Turismo	6,211,789,868	5,461,826,197	6,813,628,078	7,743,059,541
22 Instituto Federal Electoral	11,981,449,301	8,670,533,732	10,269,453,512	15,594,119,512
23 Provisiones Salariales y Económicas	63,772,952,922	80,116,440,784	104,327,791,012	85,837,610,632
24 Deuda Pública	210,662,455,088	216,873,522,809	232,867,368,519	252,350,469,597
25 Previsiones y Aportaciones para los Sistemas de Educación Básica, Normal, Tecnológica y de Adultos	26,980,353,087	27,215,412,463	29,971,670,833	33,783,739,578
27 Función Pública	2,649,753,966	2,441,034,995	1,968,411,473	1,704,373,016
28 Participaciones a Entidades Federativas y Municipios	375,717,324,319	437,327,620,540	477,256,190,535	494,264,532,390
3 Poder Judicial	31,380,018,211	33,892,179,437	37,814,109,210	39,716,381,679
30 Adeudos de Ejercicios Fiscales Anteriores	15,925,865,923	21,580,087,698	19,653,453,321	20,820,008,318
31 Tribunales Agrarios	755,375,626	682,310,844	744,323,295	880,101,073
32 Tribunal Federal de Justicia Fiscal y Administrativa	1,419,459,899	1,677,714,584	1,849,561,096	2,082,141,348
33 Aportaciones Federales para Entidades Federativas y Municipios	412,466,550,584	434,261,258,399	469,723,433,343	500,516,089,128
34 Erogaciones para los Programas de Apoyo a Ahorradores y Deudores de la Banca	31,076,361,104	13,720,845,115	15,446,121,489	13,329,505,890
35 Comisión Nacional de los Derechos Humanos	892,650,684	889,968,384	1,067,411,782	1,246,565,593
36 Seguridad Pública	33,557,187,282	30,184,866,188	41,056,942,510	49,165,838,529
37 Consejería Jurídica del Ejecutivo Federal	470,591,688	111,921,808	114,012,269	115,673,366

Figure1. Examining Government Expenditure across years



ECON0	EGRESOS
Sum of EXECUTED	Column Labels
Row Labels	2008	2009	2010	2011	2012
1 Poder Legislativo	9,318,462,963	9,559,425,444	9,918,001,845	10,458,323,417	11,781,395,665
10 Economía	17,384,944,371	18,384,373,265	15,704,828,698	17,840,322,917	19,907,404,378
11 Educación Pública	188,378,741,121	208,757,537,987	225,696,355,328	252,574,186,869	281,960,341,471
12 Salud	69,743,470,263	80,959,255,960	86,765,574,210	99,806,461,621	112,737,331,804
13 Marina	15,155,207,323	16,322,001,804	18,415,677,636	20,052,477,855	21,407,159,546
14 Trabajo y Previsión Social	3,959,365,991	3,992,650,165	3,864,978,233	3,889,499,217	4,360,137,180
15 Reforma Agraria	5,052,279,360	5,234,404,490	4,953,777,312	5,647,668,327	5,351,126,713
16 Medio Ambiente y Recursos Naturales	38,969,631,145	45,121,097,547	48,679,030,285	52,611,748,770	58,023,989,939
17 Procuraduría General de la República	8,950,169,194	10,833,407,365	10,651,839,135	11,553,455,930	13,606,680,744
18 Energía	593,803,213,377	708,294,244,264	724,986,217,516	736,527,963,421	842,805,864,225
19 Aportaciones a Seguridad Social	453,884,357,972	281,172,679,369	330,487,746,580	362,110,396,653	405,441,138,747
2 Presidencia de la República	2,171,748,436	2,515,598,137	2,305,803,345	2,743,854,025	3,005,156,451
20 Desarrollo Social	54,126,529,223	64,000,630,887	70,871,000,000	78,706,562,743	83,878,959,098
21 Turismo	4,865,026,924	6,211,789,868	5,461,826,197	6,813,628,078	7,743,059,541
22 Instituto Federal Electoral	8,603,359,528	11,981,449,301	8,670,533,732	10,269,453,512	15,594,119,512
23 Provisiones Salariales y Económicas	251,058,077,646	63,772,952,922	80,116,440,784	104,327,791,012	85,837,610,632
24 Deuda Pública	190,732,260,050	210,662,455,088	216,873,522,809	232,867,368,519	252,350,469,597
25 Previsiones y Aportaciones para los Sistemas de Educación Básica, Normal, Tecnológica y de Adultos	23,462,090,364	26,980,353,087	27,215,412,463	29,971,670,833	33,783,739,578
27 Función Pública	2,484,197,977	2,649,753,966	2,441,034,995	1,968,411,473	1,704,373,016
28 Participaciones a Entidades Federativas y Municipios	423,454,868,318	375,717,324,319	437,327,620,540	477,256,190,535	494,264,532,390
3 Poder Judicial	29,977,812,395	31,380,018,211	33,892,179,437	37,814,109,210	39,716,381,679
30 Adeudos de Ejercicios Fiscales Anteriores	15,084,482,255	15,925,865,923	21,580,087,698	19,653,453,321	20,820,008,318
31 Tribunales Agrarios	843,624,467	755,375,626	682,310,844	744,323,295	880,101,073
32 Tribunal Federal de Justicia Fiscal y Administrativa	1,359,786,705	1,419,459,899	1,677,714,584	1,849,561,096	2,082,141,348
33 Aportaciones Federales para Entidades Federativas y Municipios	396,679,343,398	412,466,550,584	434,261,258,399	469,723,433,343	500,516,089,128
34 Erogaciones para los Programas de Apoyo a Ahorradores y Deudores de la Banca	30,042,625,738	31,076,361,104	13,720,845,115	15,446,121,489	13,329,505,890
35 Comisión Nacional de los Derechos Humanos	873,644,279	892,650,684	889,968,384	1,067,411,782	1,246,565,593
36 Seguridad Pública	21,140,289,127	33,557,187,282	30,184,866,188	41,056,942,510	49,165,838,529
37 Consejería Jurídica del Ejecutivo Federal	444,245,606	470,591,688	111,921,808	114,012,269	115,673,366
38 Consejo Nacional de Ciencia y Tecnología	11,772,437,915	14,267,214,595	15,888,102,695	17,381,461,088	18,827,117,376
4 Gobernación	7,249,106,008	8,822,423,604	14,279,608,438	17,926,866,649	22,908,935,556
40 Información Nacional Estadística y Geográfica	2,222,479,352	6,072,274,952	8,608,840,080	4,326,825,353	5,228,398,442
5 Relaciones Exteriores	7,483,580,970	7,688,538,820	8,997,652,695	8,696,824,384	9,784,370,365
50 Instituto Mexicano del Seguro Social	270,632,800,000	304,350,800,000	339,747,900,000	374,418,900,000	415,557,500,000
51 Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado	111,911,500,000	132,277,300,000	146,476,700,000	167,360,500,000	175,590,200,000

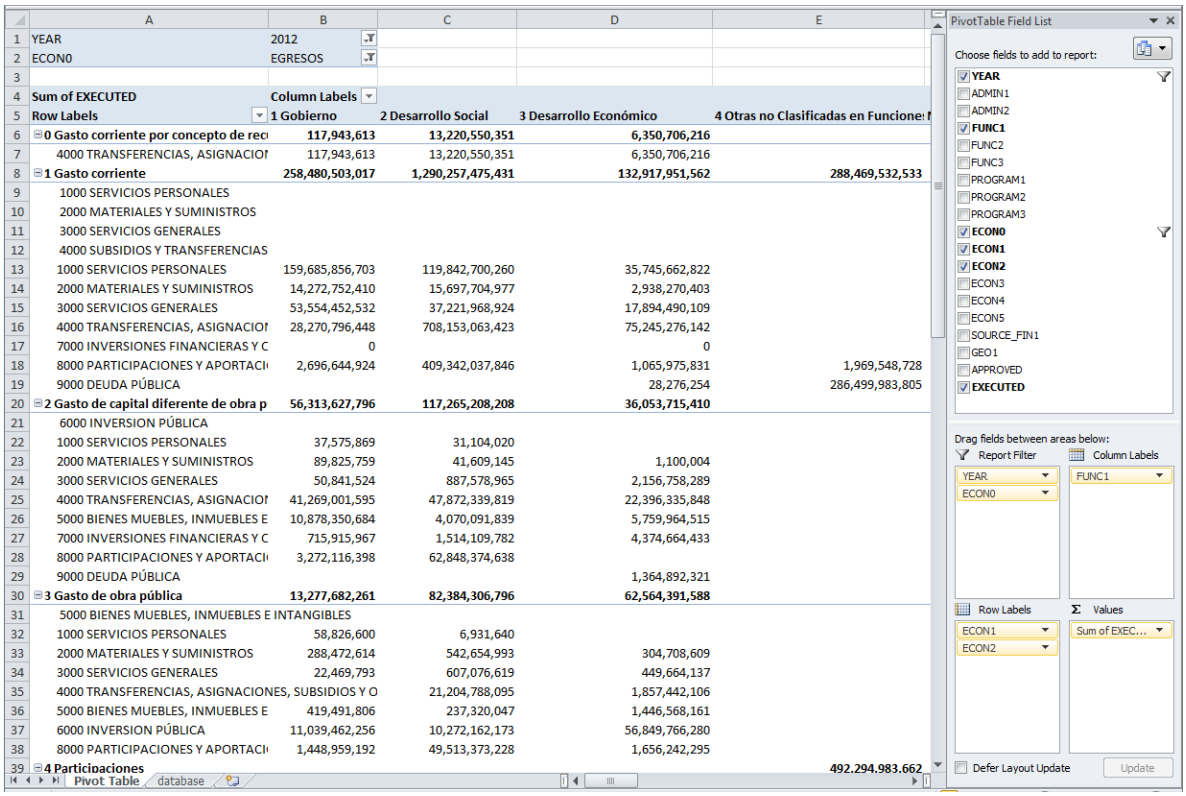
Do it yourself: how would you generate a similar table using the functional (*FUNCTION1*) instead of the administrative classification?

3.2. Example 2. Composition Breakdown

Figure 3 below presents a breakdown of 2012 government expenditures by economic category and sub-category for each sector in the Mexico functional budget classification. To generate this PivotTable, *ECON1* and *ECON2* are placed in the Row Labels box, *FUNCTION1* in the Column Labels box and the *Year* (2012) variable and ECON0 is used as a filter. The values in the body of the table consist of the sum of the *EXECUTED* variable.

Note: To only obtain expenditures figures ECON0 must be filtered; tick off "Acervo de deuda" and "Ingresos" as done in the previous example.

Figure 2. Examining the Composition of Expenditure by Sector

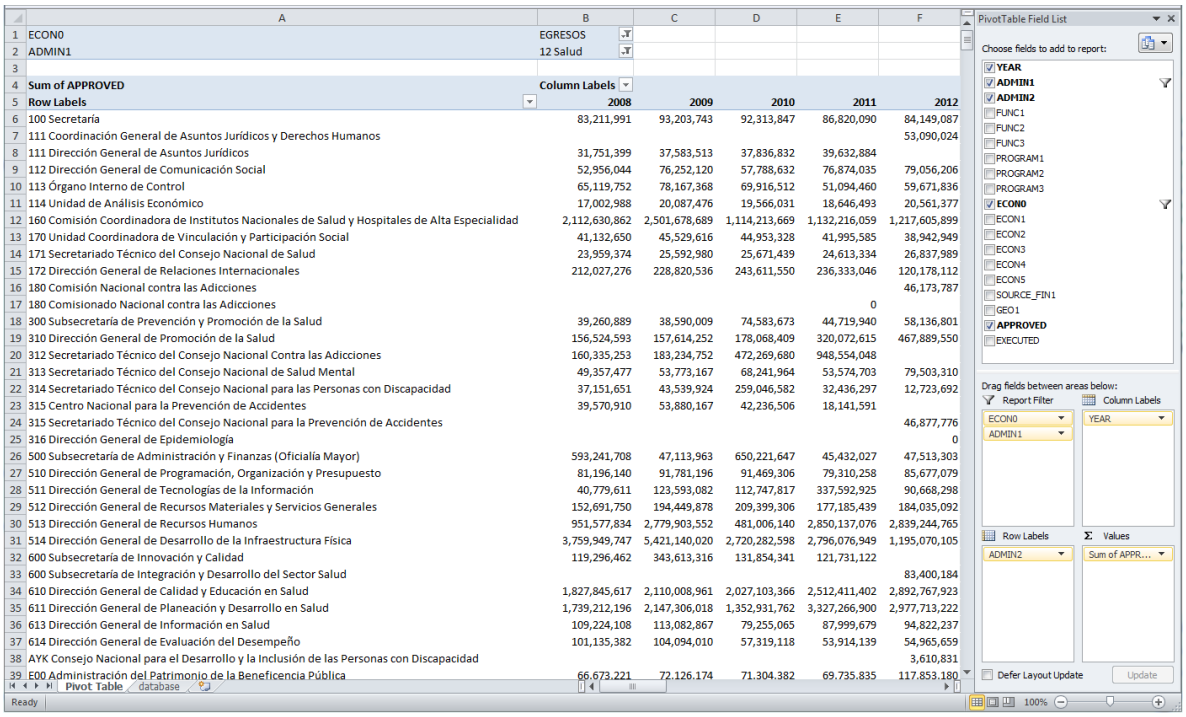


	A	B	C	D	E
1	YEAR	2012			
2	ECON0	EGRESOS			
3					
4	Sum of EXECUTED	Column Labels			
5	Row Labels	1 Gobierno	2 Desarrollo Social	3 Desarrollo Económico	4 Otras no Clasificadas en Funciones
6	0 Gasto corriente por concepto de rec	117,943,613	13,220,550,351	6,350,706,216	
7	4000 TRANSFERENCIAS, ASIGNACIOI	117,943,613	13,220,550,351	6,350,706,216	
8	1 Gasto corriente	258,480,503,017	1,290,257,475,431	132,917,951,562	288,469,532,533
9	1000 SERVICIOS PERSONALES				
10	2000 MATERIALES Y SUMINISTROS				
11	3000 SERVICIOS GENERALES				
12	4000 SUBSIDIOS Y TRANSFERENCIAS				
13	1000 SERVICIOS PERSONALES	159,685,856,703	119,842,700,260	35,745,662,822	
14	2000 MATERIALES Y SUMINISTROS	14,272,752,410	15,697,704,977	2,938,270,403	
15	3000 SERVICIOS GENERALES	53,554,452,532	37,221,968,924	17,894,490,109	
16	4000 TRANSFERENCIAS, ASIGNACIOI	28,270,796,448	708,153,063,423	75,245,276,142	
17	7000 INVERSIONES FINANCIERAS Y C	0		0	
18	8000 PARTICIPACIONES Y APORTACI	2,696,644,924	409,342,037,846	1,065,975,831	1,969,548,728
19	9000 DEUDA PÚBLICA			28,276,254	286,499,983,805
20	2 Gasto de capital diferente de obra p	56,313,627,796	117,265,208,208	36,053,715,410	
21	6000 INVERSION PÚBLICA				
22	1000 SERVICIOS PERSONALES	37,575,869	31,104,020		
23	2000 MATERIALES Y SUMINISTROS	89,825,759	41,609,145	1,100,004	
24	3000 SERVICIOS GENERALES	50,841,524	887,578,965	2,156,758,289	
25	4000 TRANSFERENCIAS, ASIGNACIOI	41,269,001,595	47,872,339,819	22,396,335,848	
26	5000 BIENES MUEBLES, INMUEBLES E	10,878,350,684	4,070,091,839	5,759,964,515	
27	7000 INVERSIONES FINANCIERAS Y C	715,915,967	1,514,109,782	4,374,664,433	
28	8000 PARTICIPACIONES Y APORTACI	3,272,116,398	62,848,374,638		
29	9000 DEUDA PÚBLICA			1,364,892,321	
30	3 Gasto de obra pública	13,277,682,261	82,384,306,796	62,564,391,588	
31	5000 BIENES MUEBLES, INMUEBLES E INTANGIBLES				
32	1000 SERVICIOS PERSONALES	58,826,600	6,931,640		
33	2000 MATERIALES Y SUMINISTROS	288,472,614	542,654,993	304,708,609	
34	3000 SERVICIOS GENERALES	22,469,793	607,076,619	449,664,137	
35	4000 TRANSFERENCIAS, ASIGNACIONES, SUBSIDIOS Y O		21,204,788,095	1,857,442,106	
36	5000 BIENES MUEBLES, INMUEBLES E	419,491,806	237,320,047	1,446,568,161	
37	6000 INVERSION PÚBLICA	11,039,462,256	10,272,162,173	56,849,766,280	
38	8000 PARTICIPACIONES Y APORTACI	1,448,959,192	49,513,373,228	1,656,242,295	
39	4 Participaciones				492,294,983,662

3.3. Example 3. Initial budget by entities in the Health Sector

Go back to the dataset for the Administration Entities. Leave Year in the Column Labels box and ADMIN2 in the Row Labels box. Replace EXECUTED amounts for APPROVED amounts in the Values box. Then, drag and drop ADMIN1 into Report Filter box (Keep ECON0 into Report Filter box). Click on the right arrow sign of the ADMIN1 tab and select "*12 - Salud*".

Figure 3: Example of Time Series Analysis: Initial Budget by Entities in the Health sector (2008-2012)

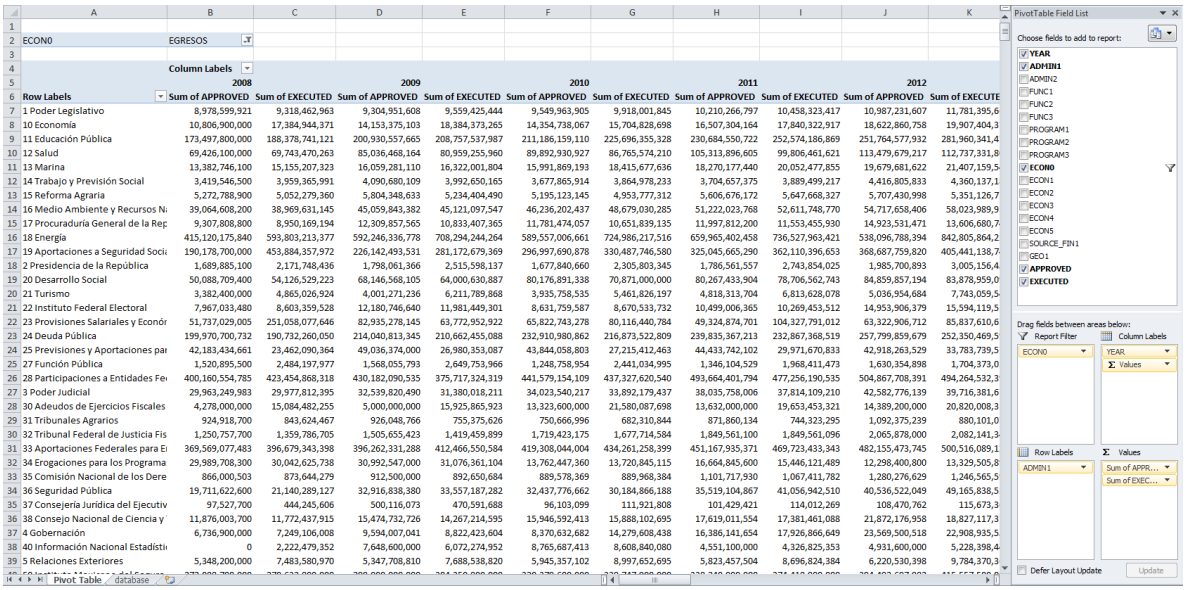


	A	B	C	D	E	F
1	ECON0	EGRESOS				
2	ADMIN1	12 Salud				
3						
4	Sum of APPROVED	Column Labels				
5	Row Labels	2008	2009	2010	2011	2012
6	100 Secretaría	83,211,991	93,203,743	92,313,847	86,820,090	84,149,087
7	111 Coordinación General de Asuntos Jurídicos y Derechos Humanos					53,090,024
8	111 Dirección General de Asuntos Jurídicos	31,751,399	37,583,513	37,836,832	39,632,884	
9	112 Dirección General de Comunicación Social	52,956,044	76,252,120	57,788,632	76,874,035	79,056,206
10	113 Órgano Interno de Control	65,119,752	78,167,368	69,916,512	51,094,460	59,671,836
11	114 Unidad de Análisis Económico	17,002,988	20,087,476	19,566,031	18,646,493	20,561,377
12	160 Comisión Coordinadora de Institutos Nacionales de Salud y Hospitales de Alta Especialidad	2,112,630,862	2,501,678,689	1,114,213,669	1,132,216,059	1,217,605,899
13	170 Unidad Coordinadora de Vinculación y Participación Social	41,132,650	45,529,616	44,953,328	41,995,585	38,942,949
14	171 Secretariado Técnico del Consejo Nacional de Salud	23,959,374	25,592,980	25,671,439	24,613,334	26,837,989
15	172 Dirección General de Relaciones Internacionales	212,027,276	228,820,536	243,611,550	236,333,046	120,178,112
16	180 Comisión Nacional contra las Adicciones					46,173,787
17	180 Comisionado Nacional contra las Adicciones				0	
18	300 Subsecretaría de Prevención y Promoción de la Salud	39,260,889	38,590,009	74,583,673	44,719,940	58,136,801
19	310 Dirección General de Promoción de la Salud	156,524,593	157,614,252	178,068,409	320,072,615	467,889,550
20	312 Secretariado Técnico del Consejo Nacional Contra las Adicciones	160,335,253	183,234,752	472,269,680	948,554,048	
21	313 Secretariado Técnico del Consejo Nacional de Salud Mental	49,357,477	53,773,167	68,241,964	53,574,703	79,503,310
22	314 Secretariado Técnico del Consejo Nacional para las Personas con Discapacidad	37,151,651	43,539,924	259,046,582	32,436,297	12,723,692
23	315 Centro Nacional para la Prevención de Accidentes	39,570,910	53,880,167	42,236,506	18,141,591	
24	315 Secretariado Técnico del Consejo Nacional para la Prevención de Accidentes					46,877,776
25	316 Dirección General de Epidemiología					0
26	500 Subsecretaría de Administración y Finanzas (Oficialía Mayor)	593,241,708	47,113,963	650,221,647	45,432,027	47,513,303
27	510 Dirección General de Programación, Organización y Presupuesto	81,196,140	91,781,196	91,469,306	79,310,258	85,677,079
28	511 Dirección General de Tecnologías de la Información	40,779,611	123,593,082	112,747,817	337,592,925	90,668,298
29	512 Dirección General de Recursos Materiales y Servicios Generales	152,691,750	194,449,878	209,399,306	177,185,439	184,035,092
30	513 Dirección General de Recursos Humanos	951,577,834	2,779,903,552	481,006,140	2,850,137,076	2,839,244,765
31	514 Dirección General de Desarrollo de la Infraestructura Física	3,759,949,747	5,421,140,020	2,720,282,598	2,796,076,949	1,195,070,105
32	600 Subsecretaría de Innovación y Calidad	119,296,462	343,613,316	131,854,341	121,731,122	
33	600 Subsecretaría de Integración y Desarrollo del Sector Salud					83,400,184
34	610 Dirección General de Calidad y Educación en Salud	1,827,845,617	2,110,008,961	2,027,103,366	2,512,411,402	2,892,767,923
35	611 Dirección General de Planeación y Desarrollo en Salud	1,739,212,196	2,147,306,018	1,352,931,762	3,327,266,900	2,977,713,222
36	613 Dirección General de Información en Salud	109,224,108	113,082,867	79,255,065	87,999,679	94,822,237
37	614 Dirección General de Evaluación del Desempeño	101,135,382	104,094,010	57,319,118	53,914,139	54,965,659
38	AYK Consejo Nacional para el Desarrollo y la Inclusión de las Personas con Discapacidad					3,610,831
39	E00 Administración del Patrimonio de la Beneficencia Pública	66,673,221	72,126,174	71,304,382	69,735,835	117,853,180

3.4. Example 4. Deviation Analysis

One of the most basic but revealing exercises you can do with BOOST is a deviation analysis; i.e., how much of the budget authorized by the Legislative Assembly was executed at the end of the year. To do this, you need to follow the following steps:

1. Place *ADMIN1* is the Row Labels box, *Year* in the Column Labels box. The values in the body of the table consist of the sum of the *APPROVED* and *PAYMENT* variables. You should get a table like the following one:



ECON0	EGRESOS
	Column Labels

	2008		2009		2010		2011		2012	
Row Labels	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTE
1 Poder Legislativo	8,978,599,921	9,318,462,963	9,304,951,608	9,559,425,444	9,549,963,905	9,918,001,845	10,210,266,797	10,458,323,417	10,987,231,607	11,781,395,6
10 Economía	10,806,900,000	17,384,944,371	14,153,375,103	18,384,373,265	14,354,738,067	15,704,828,698	16,507,304,164	17,840,322,917	18,622,860,758	19,907,404,3
11 Educación Pública	173,497,800,000	188,378,741,121	200,930,557,665	208,757,537,987	211,186,159,110	225,696,355,328	230,684,550,722	252,574,186,869	251,764,577,932	281,960,341,4
12 Salud	69,426,100,000	69,743,470,263	85,036,468,164	80,959,255,960	89,892,930,927	86,765,574,210	105,313,896,605	99,806,461,621	113,479,679,217	112,737,331,8
13 Marina	13,382,746,100	15,155,207,323	16,059,281,110	16,322,001,804	15,991,869,193	18,415,677,636	18,270,177,440	20,052,477,855	19,679,681,622	21,407,159,5
14 Trabajo y Previsión Social	3,419,546,500	3,959,365,991	4,090,680,109	3,992,650,165	3,677,865,914	3,864,978,233	3,704,657,375	3,889,499,217	4,416,805,833	4,360,137,1
15 Reforma Agraria	5,272,788,900	5,052,279,360	5,804,348,633	5,234,404,490	5,195,123,145	4,953,777,312	5,606,676,172	5,647,668,327	5,707,430,998	5,351,126,7
16 Medio Ambiente y Recursos N	39,064,608,200	38,969,631,145	45,059,843,382	45,121,097,547	46,236,202,437	48,679,030,285	51,222,023,768	52,611,748,770	54,717,658,406	58,023,989,9
17 Procuraduría General de la Rep	9,307,808,800	8,950,169,194	12,309,857,565	10,833,407,365	11,781,474,057	10,651,839,135	11,997,812,200	11,553,455,930	14,923,531,471	13,606,680,7
18 Energía	415,120,175,840	593,803,213,377	592,246,336,778	708,294,244,264	589,557,006,661	724,986,217,516	659,965,402,458	736,527,963,421	538,096,788,394	842,805,864,2
19 Aportaciones a Seguridad Soci	190,178,700,000	453,884,357,972	226,142,493,531	281,172,679,369	296,997,690,878	330,487,746,580	325,045,665,290	362,110,396,653	368,687,759,820	405,441,138,7
2 Presidencia de la República	1,689,885,100	2,171,748,436	1,798,061,366	2,515,598,137	1,677,840,660	2,305,803,345	1,786,561,557	2,743,854,025	1,985,700,893	3,005,156,4
20 Desarrollo Social	50,088,709,400	54,126,529,223	68,146,568,105	64,000,630,887	80,176,891,338	70,871,000,000	80,267,433,904	78,706,562,743	84,859,857,194	83,878,959,0
21 Turismo	3,382,400,000	4,865,026,924	4,001,271,236	6,211,789,868	3,935,758,535	5,461,826,197	4,818,313,704	6,813,628,078	5,036,954,684	7,743,059,5
22 Instituto Federal Electoral	7,967,033,480	8,603,359,528	12,180,746,640	11,981,449,301	8,631,759,587	8,670,533,732	10,499,006,365	10,269,453,512	14,953,906,379	15,594,119,5
23 Provisiones Salariales y Econór	51,737,029,005	251,058,077,646	82,935,278,145	63,772,952,922	65,822,743,278	80,116,440,784	49,324,874,701	104,327,791,012	63,322,906,712	85,837,610,6
24 Deuda Pública	199,970,700,732	190,732,260,050	214,040,813,345	210,662,455,088	232,910,980,862	216,873,522,809	239,835,367,213	232,867,368,519	257,799,859,679	252,350,469,5
25 Previsiones y Aportaciones par	42,183,434,661	23,462,090,364	49,036,374,000	26,980,353,087	43,844,058,803	27,215,412,463	44,433,742,102	29,971,670,833	42,918,263,529	33,783,739,5
27 Función Pública	1,520,895,500	2,484,197,977	1,568,055,793	2,649,753,966	1,248,758,954	2,441,034,995	1,346,104,529	1,968,411,473	1,630,354,898	1,704,373,0
28 Participaciones a Entidades Fe	400,160,554,785	423,454,868,318	430,182,090,535	375,717,324,319	441,579,154,109	437,327,620,540	493,664,401,794	477,256,190,535	504,867,708,391	494,264,532,3
3 Poder Judicial	29,963,249,983	29,977,812,395	32,539,820,490	31,380,018,211	34,023,540,217	33,892,179,437	38,035,758,006	37,814,109,210	42,582,776,139	39,716,381,6
30 Adeudos de Ejercicios Fiscales	4,278,000,000	15,084,482,255	5,000,000,000	15,925,865,923	13,323,600,000	21,580,087,698	13,632,000,000	19,653,453,321	14,389,200,000	20,820,008,3
31 Tribunales Agrarios	924,918,700	843,624,467	926,048,766	755,375,626	750,666,996	682,310,844	871,860,134	744,323,295	1,092,375,239	880,101,0
32 Tribunal Federal de Justicia Fis	1,250,757,700	1,359,786,705	1,505,655,423	1,419,459,899	1,719,423,175	1,677,714,584	1,849,561,096	1,849,561,096	2,065,878,000	2,082,141,3
33 Aportaciones Federales para Ei	369,569,077,483	396,679,343,398	396,262,331,288	412,466,550,584	419,308,044,004	434,261,258,399	451,167,935,371	469,723,433,343	482,155,473,745	500,516,089,1
34 Erogaciones para los Programa	29,989,708,300	30,042,625,738	30,992,547,000	31,076,361,104	13,762,447,360	13,720,845,115	16,664,845,600	15,446,121,489	12,298,400,800	13,329,505,8
35 Comisión Nacional de los Dere	866,000,503	873,644,279	912,500,000	892,650,684	889,578,369	889,968,384	1,101,717,930	1,067,411,782	1,280,276,629	1,246,565,5
36 Seguridad Pública	19,711,622,600	21,140,289,127	32,916,838,380	33,557,187,282	32,437,776,662	30,184,866,188	35,519,104,867	41,056,942,510	40,536,522,049	49,165,838,5
37 Consejería Jurídica del Ejecutiv	97,527,700	444,245,606	500,116,073	470,591,688	96,103,099	111,921,808	101,429,421	114,012,269	108,470,762	115,673,3
38 Consejo Nacional de Ciencia y	11,876,003,700	11,772,437,915	15,474,732,726	14,267,214,595	15,946,592,413	15,888,102,695	17,619,011,554	17,381,461,088	21,872,176,958	18,827,117,3
4 Gobernación	6,736,900,000	7,249,106,008	9,594,007,041	8,822,423,604	8,370,632,682	14,279,608,438	16,386,141,654	17,926,866,649	23,569,500,518	22,908,935,5
40 Información Nacional Estadísti	0	2,222,479,352	7,648,600,000	6,072,274,952	8,765,687,413	8,608,840,080	4,551,100,000	4,326,825,353	4,931,600,000	5,228,398,4
5 Relaciones Exteriores	5,348,200,000	7,483,580,970	5,347,708,810	7,688,538,820	5,945,357,102	8,997,652,695	5,823,457,504	8,696,824,384	6,220,530,398	9,784,370,3

PivotTable Field List

Choose fields to add to report:

- YEAR
- ADMIN1
- ADMIN2
- FUNC1
- FUNC2
- FUNC3
- PROGRAM1
- PROGRAM2
- PROGRAM3
- ECON0
- ECON1
- ECON2
- ECON3
- ECON4
- ECON5
- SOURCE_FIN1
- GEO1
- APPROVED
- EXECUTED

Drag fields between areas below:

Report Filter: ECON0

Column Labels: YEAR

Values: Sum of APPR..., Sum of EXEC...

Row Labels: ADMIN1

Defer Layout Update

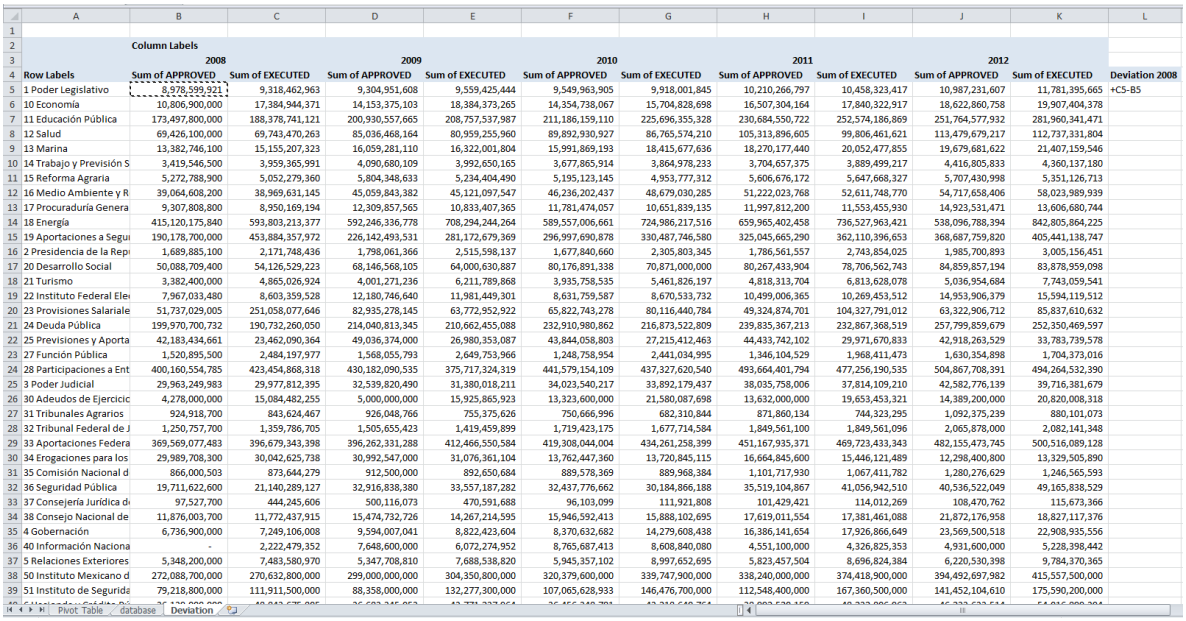
Update

2. Create a new sheet called “Deviation”.
3. Go back to sheet Pivot Table. Copy the Table you created in step 1.
4. Paste the table in the cell A1 of sheet “Deviation”. We need to copy and paste the table in a different sheet because Pivot Tables erase data in case modifications are done. In other words, any analysis you do in this sheet will get lost if you create a new pivot table. At the end of this step, sheet “Deviation” should look like this:
5.

	Column Labels									
	2008		2009		2010		2011		2012	
Row Labels	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED
1 Poder Legislativo	8978599921	9318462963	9304951608	9559425444	9549963905	9918001845	10210266797	10458323417	10987231607	11781395665
10 Economía	10806900000	17384944371	14153375103	18384373265	14354738067	15704828698	16507304164	17840322917	18622860758	19907404378
11 Educación Pública	1.73498E+11	1.88379E+11	2.00931E+11	2.08758E+11	2.11186E+11	2.25696E+11	2.30685E+11	2.52574E+11	2.51765E+11	2.8196E+11
12 Salud	69426100000	69743470263	85036468164	80959255960	89892930927	86765574210	1.05314E+11	99806461621	1.1348E+11	1.12737E+11
13 Marina	13382746100	15155207323	16059281110	16322001804	15991869193	18415677636	18270177440	20052477855	19679681622	21407159546
14 Trabajo y Previsión Social	3419546500	3959365991	4090680109	3992650165	3677865914	3864978233	3704657375	3889499217	4416805833	4360137180
15 Reforma Agraria	5272788900	5052279360	5804348633	5234404490	5195123145	4953777312	5606676172	5647668327	5707430998	5351126713
16 Medio Ambiente y Recursos Naturale	39064608200	38969631145	45059843382	45121097547	46236202437	48679030285	51222023768	52611748770	54717658406	58023989939
17 Procuraduría General de la República	9307808800	8950169194	12309857565	10833407365	11781474057	10651839135	11997812200	11553455930	14923531471	13606680744
18 Energía	4.1512E+11	5.93803E+11	5.92246E+11	7.08294E+11	5.89557E+11	7.24986E+11	6.59965E+11	7.36528E+11	5.38097E+11	8.42806E+11
19 Aportaciones a Seguridad Social	1.90179E+11	4.53884E+11	2.26142E+11	2.81173E+11	2.96998E+11	3.30488E+11	3.25046E+11	3.6211E+11	3.68688E+11	4.05441E+11
2 Presidencia de la República	1689885100	2171748436	1798061366	2515598137	1677840660	2305803345	1786561557	2743854025	1985700893	3005156451
20 Desarrollo Social	50088709400	54126529223	68146568105	64000630887	80176891338	70871000000	80267433904	78706562743	84859857194	83878959098
21 Turismo	3382400000	4865026924	4001271236	6211789868	3935758535	5461826197	4818313704	6813628078	5036954684	7743059541
22 Instituto Federal Electoral	7967033480	8603359528	12180746640	11981449301	8631759587	8670533732	10499006365	10269453512	14953906379	15594119512
23 Provisiones Salariales y Económicas	51737029005	2.51058E+11	82935278145	63772952922	65822743278	80116440784	49324874701	1.04328E+11	63322906712	85837610632
24 Deuda Pública	1.99971E+11	1.90732E+11	2.14041E+11	2.10662E+11	2.32911E+11	2.16874E+11	2.39835E+11	2.32867E+11	2.578E+11	2.5235E+11
25 Previsiones y Aportaciones para los S	42183434661	23462090364	49036374000	26980353087	43844058803	27215412463	44433742102	29971670833	42918263529	33783739578
27 Función Pública	1520895500	2484197977	1568055793	2649753966	1248758954	2441034995	1346104529	1968411473	1630354898	1704373016
28 Participaciones a Entidades Federati	4.00161E+11	4.23455E+11	4.30182E+11	3.75717E+11	4.41579E+11	4.37328E+11	4.93664E+11	4.77256E+11	5.04868E+11	4.94265E+11
3 Poder Judicial	29963249983	29977812395	32539820490	31380018211	34023540217	33892179437	38035758006	37814109210	42582776139	39716381679
30 Adeudos de Ejercicios Fiscales Anter	4278000000	15084482255	5000000000	15925865923	13323600000	21580087698	13632000000	19653453321	14389200000	20820008318
31 Tribunales Agrarios	924918700	843624467	926048766	755375626	750666996	682310844	871860134	744323295	1092375239	880101073.3
32 Tribunal Federal de Justicia Fiscal y A	1250757700	1359786705	1505655423	1419459899	1719423175	1677714584	1849561100	1849561096	2065878000	2082141348
33 Aportaciones Federales para Entidad	3.69569E+11	3.96679E+11	3.96262E+11	4.12467E+11	4.19308E+11	4.34261E+11	4.51168E+11	4.69723E+11	4.82155E+11	5.00516E+11
34 Erogaciones para los Programas de A	29989708300	30042625738	30992547000	31076361104	13762447360	13720845115	16664845600	15446121489	12298400800	13329505890
35 Comisión Nacional de los Derechos H	866000503	873644279	912500000	892650684	889578369	889968384	1101717930	1067411782	1280276629	1246565593
36 Seguridad Pública	19711622600	21140289127	32916838380	33557187282	32437776662	30184866188	35519104867	41056942510	40536522049	49165838529
37 Consejería Jurídica del Ejecutivo Fed	97527700	444245606	500116073	470591688	96103099	111921808	101429421	114012269	108470762	115673366.4
38 Consejo Nacional de Ciencia y Tecno	11876003700	11772437915	15474732726	14267214595	15946592413	15888102695	17619011554	17381461088	21872176958	18827117376
4 Gobernación	6736900000	7249106008	9594007041	8822423604	8370632682	14279608438	16386141654	17926866649	23569500518	22908935556
40 Información Nacional Estadística y Ge	0	2222479352	7648600000	6072274952	8765687413	8608840080	4551100000	4326825353	4931600000	5228398442
5 Relaciones Exteriores	5348200000	7483580970	5347708810	7688538820	5945357102	8997652695	5823457504	8696824384	6220530398	9784370365
50 Instituto Mexicano del Seguro Social	2.72089E+11	2.70633E+11	2.99E+11	3.04351E+11	3.2038E+11	3.39748E+11	3.3824E+11	3.74419E+11	3.94493E+11	4.15558E+11
51 Instituto de Seguridad y Servicios So	79218800000	1.11912E+11	88358000000	1.32277E+11	1.07066E+11	1.46477E+11	1.12548E+11	1.67361E+11	1.41452E+11	1.7559E+11

Pivot Table | database | Deviation

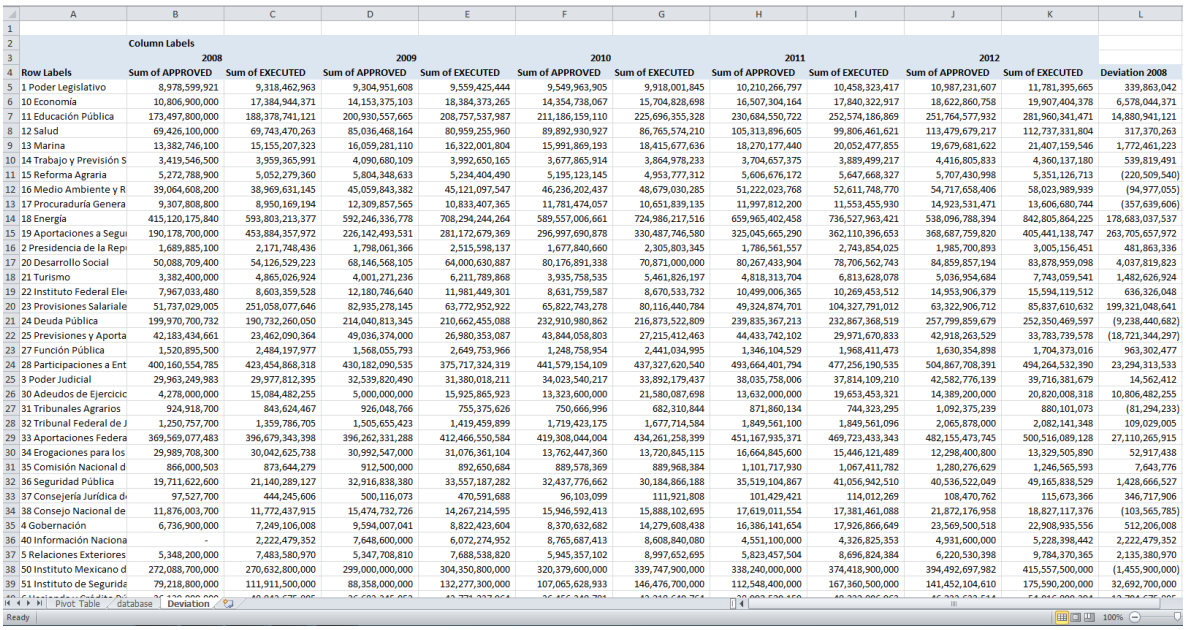
6. In cell L4, write “Deviation 2008”. We will estimate the deviation between executed and budgeted amounts in this column.
7. In cell L5, write down the following formula: =C5-B5. This is the estimation of the difference between the executed and the budgeted amounts for 2008.



	A	B	C	D	E	F	G	H	I	J	K	L
1												
2		Column Labels										
3		2008		2009		2010		2011		2012		
4	Row Labels	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Deviation 2008
5	1 Poder Legislativo	8,978,599,921	9,318,462,963	9,304,951,608	9,559,425,444	9,549,963,905	9,918,001,845	10,210,266,797	10,458,323,417	10,987,231,607	11,781,395,665	+C5-B5
6	10 Economía	10,806,900,000	17,384,944,371	14,153,375,103	18,384,373,265	14,354,738,067	15,704,828,698	16,507,304,164	17,840,322,917	18,622,860,758	19,907,404,378	
7	11 Educación Pública	173,497,800,000	188,378,741,121	200,930,557,665	208,757,537,987	211,186,159,110	225,696,355,328	230,684,550,722	252,574,186,869	251,764,577,932	281,960,341,471	
8	12 Salud	69,426,100,000	69,743,470,263	85,036,468,164	80,959,255,960	89,892,930,927	86,765,574,210	105,313,896,605	99,806,461,621	113,479,679,217	112,737,331,804	
9	13 Marina	13,382,746,100	15,155,207,323	16,059,281,110	16,322,001,804	15,991,869,193	18,415,677,636	18,270,177,440	20,052,477,855	19,679,681,622	21,407,159,546	
10	14 Trabajo y Previsión S	3,419,546,500	3,959,365,991	4,090,680,109	3,992,650,165	3,677,865,914	3,864,978,233	3,704,657,375	3,889,499,217	4,416,805,833	4,360,137,180	
11	15 Reforma Agraria	5,272,788,900	5,052,279,360	5,804,348,633	5,234,404,490	5,195,123,145	4,953,777,312	5,606,676,172	5,647,668,327	5,707,430,998	5,351,126,713	
12	16 Medio Ambiente y R	39,064,608,200	38,969,631,145	45,059,843,382	45,121,097,547	46,236,202,437	48,679,030,285	51,222,023,768	52,611,748,770	54,717,658,406	58,023,989,939	
13	17 Procuraduría Genera	9,307,808,800	8,950,169,194	12,309,857,565	10,833,407,365	11,781,474,057	10,651,839,135	11,997,812,200	11,553,455,930	14,923,531,471	13,606,680,744	
14	18 Energía	415,120,175,840	593,803,213,377	592,246,336,778	708,294,244,264	589,557,006,661	724,986,217,516	659,965,402,458	736,527,963,421	538,096,788,394	842,805,864,225	
15	19 Aportaciones a Segui	190,178,700,000	453,884,357,972	226,142,493,531	281,172,679,369	296,997,690,878	330,487,746,580	325,045,665,290	362,110,396,653	368,687,759,820	405,441,138,747	
16	2 Presidencia de la Repu	1,689,885,100	2,171,748,436	1,798,061,366	2,515,598,137	1,677,840,660	2,305,803,345	1,786,561,557	2,743,854,025	1,985,700,893	3,005,156,451	
17	20 Desarrollo Social	50,088,709,400	54,126,529,223	68,146,568,105	64,000,630,887	80,176,891,338	70,871,000,000	80,267,433,904	78,706,562,743	84,859,857,194	83,878,959,098	
18	21 Turismo	3,382,400,000	4,865,026,924	4,001,271,236	6,211,789,868	3,935,758,535	5,461,826,197	4,818,313,704	6,813,628,078	5,036,954,684	7,743,059,541	
19	22 Instituto Federal Elec	7,967,033,480	8,603,359,528	12,180,746,640	11,981,449,301	8,631,759,587	8,670,533,732	10,499,006,365	10,269,453,512	14,953,906,379	15,594,119,512	
20	23 Provisiones Salariale	51,737,029,005	251,058,077,646	82,935,278,145	63,772,952,922	65,822,743,278	80,116,440,784	49,324,874,701	104,327,791,012	63,322,906,712	85,837,610,632	
21	24 Deuda Pública	199,970,700,732	190,732,260,050	214,040,813,345	210,662,455,088	232,910,980,862	216,873,522,809	239,835,367,213	232,867,368,519	257,799,859,679	252,350,469,597	
22	25 Previsiones y Aporta	42,183,434,661	23,462,090,364	49,036,374,000	26,980,353,087	43,844,058,803	27,215,412,463	44,433,742,102	29,971,670,833	42,918,263,529	33,783,739,578	
23	27 Función Pública	1,520,895,500	2,484,197,977	1,568,055,793	2,649,753,966	1,248,758,954	2,441,034,995	1,346,104,529	1,968,411,473	1,630,354,898	1,704,373,016	
24	28 Participaciones a Ent	400,160,554,785	423,454,868,318	430,182,090,535	375,717,324,319	441,579,154,109	437,327,620,540	493,664,401,794	477,256,190,535	504,867,708,391	494,264,532,390	
25	3 Poder Judicial	29,963,249,983	29,977,812,395	32,539,820,490	31,380,018,211	34,023,540,217	33,892,179,437	38,035,758,006	37,814,109,210	42,582,776,139	39,716,381,679	
26	30 Adeudos de Ejercicic	4,278,000,000	15,084,482,255	5,000,000,000	15,925,865,923	13,323,600,000	21,580,087,698	13,632,000,000	19,653,453,321	14,389,200,000	20,820,008,318	
27	31 Tribunales Agrarios	924,918,700	843,624,467	926,048,766	755,375,626	750,666,996	682,310,844	871,860,134	744,323,295	1,092,375,239	880,101,073	
28	32 Tribunal Federal de J	1,250,757,700	1,359,786,705	1,505,655,423	1,419,459,899	1,719,423,175	1,677,714,584	1,849,561,100	1,849,561,096	2,065,878,000	2,082,141,348	
29	33 Aportaciones Federa	369,569,077,483	396,679,343,398	396,262,331,288	412,466,550,584	419,308,044,004	434,261,258,399	451,167,935,371	469,723,433,343	482,155,473,745	500,516,089,128	
30	34 Erogaciones para los	29,989,708,300	30,042,625,738	30,992,547,000	31,076,361,104	13,762,447,360	13,720,845,115	16,664,845,600	15,446,121,489	12,298,400,800	13,329,505,890	
31	35 Comisión Nacional d	866,000,503	873,644,279	912,500,000	892,650,684	889,578,369	889,968,384	1,101,717,930	1,067,411,782	1,280,276,629	1,246,565,593	
32	36 Seguridad Pública	19,711,622,600	21,140,289,127	32,916,838,380	33,557,187,282	32,437,776,662	30,184,866,188	35,519,104,867	41,056,942,510	40,536,522,049	49,165,838,529	
33	37 Consejería Jurídica d	97,527,700	444,245,606	500,116,073	470,591,688	96,103,099	111,921,808	101,429,421	114,012,269	108,470,762	115,673,366	
34	38 Consejo Nacional de	11,876,003,700	11,772,437,915	15,474,732,726	14,267,214,595	15,946,592,413	15,888,102,695	17,619,011,554	17,381,461,088	21,872,176,958	18,827,117,376	
35	4 Gobernación	6,736,900,000	7,249,106,008	9,594,007,041	8,822,423,604	8,370,632,682	14,279,608,438	16,386,141,654	17,926,866,649	23,569,500,518	22,908,935,556	
36	40 Información Naciona	-	2,222,479,352	7,648,600,000	6,072,274,952	8,765,687,413	8,608,840,080	4,551,100,000	4,326,825,353	4,931,600,000	5,228,398,442	
37	5 Relaciones Exteriores	5,348,200,000	7,483,580,970	5,347,708,810	7,688,538,820	5,945,357,102	8,997,652,695	5,823,457,504	8,696,824,384	6,220,530,398	9,784,370,365	
38	50 Instituto Mexicano d	272,088,700,000	270,632,800,000	299,000,000,000	304,350,800,000	320,379,600,000	339,747,900,000	338,240,000,000	374,418,900,000	394,492,697,982	415,557,500,000	
39	51 Instituto de Seguridad	79,218,800,000	111,911,500,000	88,358,000,000	132,277,300,000	107,065,628,933	146,476,700,000	112,548,400,000	167,360,500,000	141,452,104,610	175,590,200,000	

Pivot Table | database | Deviation

8. Extend the formula until it reaches the end of your table. At the end of this step, your table should look like this:



	A	B	C	D	E	F	G	H	I	J	K	L
1												
2		Column Labels										
3		2008		2009		2010		2011		2012		
4	Row Labels	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Sum of APPROVED	Sum of EXECUTED	Deviation 2008
5	1 Poder Legislativo	8,978,599,921	9,318,462,963	9,304,951,608	9,559,425,444	9,549,963,905	9,918,001,845	10,210,266,797	10,458,323,417	10,987,231,607	11,781,395,665	339,863,042
6	10 Economía	10,806,900,000	17,384,944,371	14,153,375,103	18,384,373,265	14,354,738,067	15,704,828,698	16,507,304,164	17,840,322,917	18,622,860,758	19,907,404,378	6,578,044,371
7	11 Educación Pública	173,497,800,000	188,378,741,121	200,930,557,665	208,757,537,987	211,186,159,110	225,696,355,328	230,684,550,722	252,574,186,869	251,764,577,932	281,960,341,471	14,880,941,121
8	12 Salud	69,426,100,000	69,743,470,263	85,036,468,164	80,959,255,960	89,892,930,927	86,765,574,210	105,313,896,605	99,806,461,621	113,479,679,217	112,737,331,804	317,370,263
9	13 Marina	13,382,746,100	15,155,207,323	16,059,281,110	16,322,001,804	15,991,869,193	18,415,677,636	18,270,177,440	20,052,477,855	19,679,681,622	21,407,159,546	1,772,461,223
10	14 Trabajo y Previsión S	3,419,546,500	3,959,365,991	4,090,680,109	3,992,650,165	3,677,865,914	3,864,978,233	3,704,657,375	3,889,499,217	4,416,805,833	4,360,137,180	539,819,491
11	15 Reforma Agraria	5,272,788,900	5,052,279,360	5,804,348,633	5,234,404,490	5,195,123,145	4,953,777,312	5,606,676,172	5,647,668,327	5,707,430,998	5,351,126,713	(220,509,540)
12	16 Medio Ambiente y R	39,064,608,200	38,969,631,145	45,059,843,382	45,121,097,547	46,236,202,437	48,679,030,285	51,222,023,768	52,611,748,770	54,717,658,406	58,023,989,939	(94,977,055)
13	17 Procuraduría Genera	9,307,808,800	8,950,169,194	12,309,857,565	10,833,407,365	11,781,474,057	10,651,839,135	11,997,812,200	11,553,455,930	14,923,531,471	13,606,680,744	(357,639,606)
14	18 Energía	415,120,175,840	593,803,213,377	592,246,336,778	708,294,244,264	589,557,006,661	724,986,217,516	659,965,402,458	736,527,963,421	538,096,788,394	842,805,864,225	178,683,037,537
15	19 Aportaciones a Segui	190,178,700,000	453,884,357,972	226,142,493,531	281,172,679,369	296,997,690,878	330,487,746,580	325,045,665,290	362,110,396,653	368,687,759,820	405,441,138,747	263,705,657,972
16	2 Presidencia de la Repu	1,689,885,100	2,171,748,436	1,798,061,366	2,515,598,137	1,677,840,660	2,305,803,345	1,786,561,557	2,743,854,025	1,985,700,893	3,005,156,451	481,863,336
17	20 Desarrollo Social	50,088,709,400	54,126,529,223	68,146,568,105	64,000,630,887	80,176,891,338	70,871,000,000	80,267,433,904	78,706,562,743	84,859,857,194	83,878,959,098	4,037,819,823
18	21 Turismo	3,382,400,000	4,865,026,924	4,001,271,236	6,211,789,868	3,935,758,535	5,461,826,197	4,818,313,704	6,813,628,078	5,036,954,684	7,743,059,541	1,482,626,924
19	22 Instituto Federal Elec	7,967,033,480	8,603,359,528	12,180,746,640	11,981,449,301	8,631,759,587	8,670,533,732	10,499,006,365	10,269,453,512	14,953,906,379	15,594,119,512	636,326,048
20	23 Provisiones Salariale	51,737,029,005	251,058,077,646	82,935,278,145	63,772,952,922	65,822,743,278	80,116,440,784	49,324,874,701	104,327,791,012	63,322,906,712	85,837,610,632	199,321,048,641
21	24 Deuda Pública	199,970,700,732	190,732,260,050	214,040,813,345	210,662,455,088	232,910,980,862	216,873,522,809	239,835,367,213	232,867,368,519	257,799,859,679	252,350,469,597	(9,238,440,682)
22	25 Previsiones y Aporta	42,183,434,661	23,462,090,364	49,036,374,000	26,980,353,087	43,844,058,803	27,215,412,463	44,433,742,102	29,971,670,833	42,918,263,529	33,783,739,578	(18,721,344,297)
23	27 Función Pública	1,520,895,500	2,484,197,977	1,568,055,793	2,649,753,966	1,248,758,954	2,441,034,995	1,346,104,529	1,968,411,473	1,630,354,898	1,704,373,016	963,302,477
24	28 Participaciones a Ent	400,160,554,785	423,454,868,318	430,182,090,535	375,717,324,319	441,579,154,109	437,327,620,540	493,664,401,794	477,256,190,535	504,867,708,391	494,264,532,390	23,294,313,533
25	3 Poder Judicial	29,963,249,983	29,977,812,395	32,539,820,490	31,380,018,211	34,023,540,217	33,892,179,437	38,035,758,006	37,814,109,210	42,582,776,139	39,716,381,679	14,562,412
26	30 Adeudos de Ejercicic	4,278,000,000	15,084,482,255	5,000,000,000	15,925,865,923	13,323,600,000	21,580,087,698	13,632,000,000	19,653,453,321	14,389,200,000	20,820,008,318	10,806,482,255
27	31 Tribunales Agrarios	924,918,700	843,624,467	926,048,766	755,375,626	750,666,996	682,310,844	871,860,134	744,323,295	1,092,375,239	880,101,073	(81,294,233)
28	32 Tribunal Federal de J	1,250,757,700	1,359,786,705	1,505,655,423	1,419,459,899	1,719,423,175	1,677,714,584	1,849,561,100	1,849,561,096	2,065,878,000	2,082,141,348	109,029,005
29	33 Aportaciones Federa	369,569,077,483	396,679,343,398	396,262,331,288	412,466,550,584	419,308,044,004	434,261,258,399	451,167,935,371	469,723,433,343	482,155,473,745	500,516,089,128	27,110,265,915
30	34 Erogaciones para los	29,989,708,300	30,042,625,738	30,992,547,000	31,076,361,104	13,762,447,360	13,720,845,115	16,664,845,600	15,446,121,489	12,298,400,800	13,329,505,890	52,917,438
31	35 Comisión Nacional d	866,000,503	873,644,279	912,500,000	892,650,684	889,578,369	889,968,384	1,101,717,930	1,067,411,782	1,280,276,629	1,246,565,593	7,643,776
32	36 Seguridad Pública	19,711,622,600	21,140,289,127	32,916,838,380	33,557,187,282	32,437,776,662	30,184,866,188	35,519,104,867	41,056,942,510	40,536,522,049	49,165,838,529	1,428,666,527
33	37 Consejería Jurídica d	97,527,700	444,245,606	500,116,073	470,591,688	96,103,099	111,921,808	101,429,421	114,012,269	108,470,762	115,673,366	346,717,906
34	38 Consejo Nacional de	11,876,003,700	11,772,437,915	15,474,732,726	14,267,214,595	15,946,592,413	15,888,102,695	17,619,011,554	17,381,461,088	21,872,176,958	18,827,117,376	(103,565,785)
35	4 Gobernación	6,736,900,000	7,249,106,008	9,594,007,041	8,822,423,604	8,370,632,682	14,279,608,438	16,386,141,654	17,926,866,649	23,569,500,518	22,908,935,556	512,206,008
36	40 Información Naciona	-	2,222,479,352	7,648,600,000	6,072,274,952	8,765,687,413	8,608,840,080	4,551,100,000	4,326,825,353	4,931,600,000	5,228,398,442	2,222,479,352
37	5 Relaciones Exteriores	5,348,200,000	7,483,580,970	5,347,708,810	7,688,538,820	5,945,357,102	8,997,652,695	5,823,457,504	8,696,824,384	6,220,530,398	9,784,370,365	2,135,380,970
38	50 Instituto Mexicano d	272,088,700,000	270,632,800,000	299,000,000,000	304,350,800,000	320,379,600,000	339,747,900,000	338,240,000,000	374,418,900,000	394,492,697,982	415,557,500,000	(1,455,900,000)
39	51 Instituto de Seguridad	79,218,800,000	111,911,500,000	88,358,000,000	132,277,300,000	107,065,628,933	146,476,700,000	112,548,400,000	167,360,500,000	141,452,104,610	175,590,200,000	32,692,700,000

Pivot Table | database | Deviation

Ready

9. Repeat the process for the other years.